Nuclear Division News

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Jack Case, Robert Hart

Community Service Awards deadline set for July 30

The nomination deadline for the new Union Carbide Community Service Awards Program is Friday, July 30. Completed forms should be submitted to the following facility program coordinators: Kathy D. Coleman, Y-12; Harry G. Conner, ORGDP; W. Charles Kuykendall, ORNL; and Howard Pulley, Paducah.

Nuclear Division employees engaged in voluntary, uncompensated activities that benefit their communities are eligible for the awards and may be nominated by their co-workers or by themselves. Selection committees at each facility composed of Carbide and community representatives will review the nom-

inations and select the award recipients.

A total of 37 Nuclear Division employees will be recognized this year, with 10 awards presented at each Oak Ridge installation and 7 at Paducah. The number of available awards is determined by each facility's employee population.

The awards will be presented at a special ceremony in September. Each recipient will receive a letter of commendation, an award certificate and a pin, in addition to a \$200 award to be contributed to the community organization or organizations of the employee's choice.

Former Y-12 Plant manager earns highest DOE citation

Jack M. Case, who retired as Y-12 manager in January, was recognized last week in Oak Rdige with the Department of Energy's highest award. In special ceremonies at the Elks Club, he was presented the Distinguished Associate Award — the highest citation given for public service to employees of contractor organizations.

Robert J. Hart, manager of DOE's Oak Ridge Operations, presented Case the award, which was signed by DOE Secretary James B. Edwards. The citation reads:

"In recognition of outstanding accomplishments while employed by Union Carbide Corporation at Oak Ridge, Tennessee, from 1944 to 1982. His contributions to the Oak Ridge Y-12 Plant resulted in maintaining excellent manufacturing standards for the benefit of the nation's nuclear weapons program."

In presenting the award, Hart said, "His many personal contributions and the Y-12 Plant's accomplishments under his leadership are well known throughout the DOE weapons complex and he is deserving of the award."

Case served as Y-12 plant manager for 13 years. He joined the Manhattan Project in 1944 as a tool and die maker and spent his entire career in Y-12. Later he served as craft foreman, general foreman, general foreman for shops, Maintenance Operations superintendent and, in 1962, was named assistant superintendent of the plant. In 1967, he was named deputy plant superintendent, and plant manager in January, 1969.

Case spent his 38 years helping Y-12 gain its "can do" reputation. In addition, he nurtured the Y-12 spirit of turning out a quality product on schedule at a minimum cost.

He is a member of the American Society of Tool and Manufacturing Engineers and is a charter member of the Northeast Section of the American Welding Society. His many community involvements included efforts in building and supporting the Sheltered Workshop, where handicapped young and old alike can learn skills to help them become self-sufficient.

Case and his wife, Chris, live at 102 Wedgewood Road, Oak Ridge. He has three children, Larry, Patrick and Linda Case Henry.

Corporate world of Union Carbide...

UNION CARBIDE CORPORATION has announced an agreement in principle with ARCO Chemical Company, a division of Atlantic Richfield Company, to transfer Union Carbide's urethane polyols business to ARCO Chemical. Union Carbide expects to realize a gain in the range of 60 cents per share from the transaction.

Under the agreement, ARCO would acquire all of Union Carbide's urethane polyols manufacturing and distribution facilities, inventories and all technology and patents worldwide, subject to licenses previously granted. The manufacturing assets are located at our plants in South Charleston and Institute, W. Va.

Under terms of the agreement, Union Carbide will continue to operate the manufacturing facilities and act as sales agent for the urethane polyol products involved.

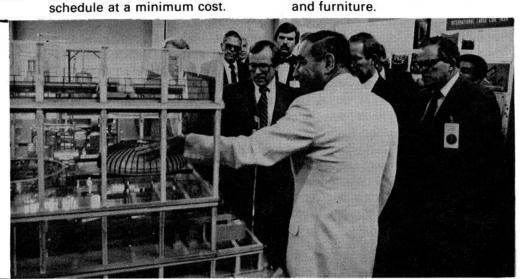
Polyols are chemicals used in the manufacture of a wide spectrum of polyurethanes which find broad application in such forms as foams, elastomers, coatings, etc., used in products for automobiles, bedding, carpeting, construction materials and furniture.

In this issue...

Senate Majority Leader Howard Baker and Governor Lamar Alexander recently visited facilities in Oak Ridge. Photographs are on page 7.

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Heart disease and drinking water

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

Death rates from heart disease vary a great deal in different parts of the United States. Rates are high along the East Coast, the Gulf of Mexico and near the Great Lakes, and they are low in the Western Plains and Middle South. No satisfactory explanation of these geographic differences has been found, although careful and detailed studies have confirmed that they are real. But why do they exist? Public health investigators have been studying this problem for some 25 years, and the answer seems to be as elusive as ever.

The public water supply seems a natural place to look. In general, death rates seem to be higher in areas where the drinking water is soft and lower where the water is hard. Water hardness is determined by the amount of calcium carbonate

or its equivalent that is dissolved in the water. The level of hardness may be expressed either in milligrams of calcium carbonate per liter or in parts of calcium carbonate per million parts (ppm) of water. The following four categories of hardness are commonly used: soft, 0-60 ppm; moderately hard, 61-120 ppm; hard, 121-180 ppm; and very hard, over 180 ppm.

Attempting to establish a relationship between the amount of calcium carbonate in the drinking water and the rates of arteriosclerotic heart disease (for example, coronary heart disease) is an extremely difficult task.

Ideally, an investigator should locate two similar populations, one consisting of persons who have drunk hard water and the other made up of persons who have consumed soft water throughout their lives.

Those in the two groups should have the same age and sex distributions and should have lived all or most of their lives in the same areas. The racial composition and general socioeconomical conditions should have been relatively stable and comparable. The general pattern of employment and location of homes also should have been similar. For example, farmers should not be compared with city dwellers.

In recent years, the increasing use of water softeners and declining use of tap water for drinking have become important factors in such studies. It has been estimated that, in some hard-water areas, 60 to 70 percent of residents use a water softener.

Water consumption

In 1971, the National Soft Drink Association estimated that the daily per capita consumption of tap water was 929 ml and the consumption of non-alcoholic bottled or canned drinks was 360 ml. With the great increase in the consumption of various juices and diet drinks, as well as the steady consumption of beer, the use of pure tap water is declining.

Considering all these problems, the development of a perfect study is impossible. Nevertheless, hundreds of large and expensive studies have been performed, with varied results. Most studies have shown that groups of persons who consume hard water have a slightly lower death rate than those who drink soft water. A few studies have shown the reverse. Some complications have developed in the statistical analyses of the data collected. Because of the many confounding factors, huge populations with thousands of deaths have to be analyzed. The results of these studies, however, have provided enough evidence to suggest that a real relationship may exist.

During the past few years, there has been increasing interest in the

possible role of various trace metals, which often are present in larger amounts in hard water. Magnesium, cadmium, chromium, lithium and zinc have been studied, with special interest directed at magnesium. Because it is an essential trace metal, it may be in marginal supply in some diets, and hard water may contribute 10-20 percent of the usual intake in some areas. Magnesium deficiency may be a contributing cause in some disturbances of heart rhythms. Thus, magnesium deficiency could be a contributing cause in some cases of fatal heart attacks.

Water softeners remove the calcium from the calcium carbonate in hard water and replace it with sodium. Several studies have suggested that blood pressure levels may be higher in people who drink softened water because of the increased sodium intake. Except in severely hypertensive patients, it is unlikely that the amount of sodium in the drinking water is important. Most of the sodium a person consumes comes from the food in his or her diet. Tap water contributes only about 10 percent of the total sodium intake.

Other research

Several leading investigators suggest that it is time to turn attention to more important and potentially productive research subjects. Drs. Douglas Hammer and Siegfried Heyden of Rex Hospital and Duke University in Raleigh and Durham, N.C., feel that the hundreds of studies performed on this subject have failed to implicate water hardness or softness as a factor in determining heart disease mortality rates.

Until better information is available, no one should lose a great deal of sleep because of concerns about the health effects of drinking hard or soft water. If there is a relationship, the answer probably will be found somewhere in the intake of trace metals. Researchers have yet to solve that puzzle.

New ORNL system completed



ORNL's Automated Safeguards Information System (OASIS), a highly automated management system designed to provide for strict control of nuclear materials inventory, was dedicated recently in ceremonies attended by a DOE nuclear materials survey team. OASIS is part of a \$6-million ORNL safeguards upgrade project administered by the Laboratory Protection Division. W. F. (Skipper) Lee Jr., seated, program analyst in the Computer Sciences Division, demonstrates OASIS to, left to right, Edna M. Arwood, computer operator in ORNL's Laboratory Protection Division; Billy Joe Campbell, chemical engineer at DOE/ORO; Garland R. Proco, director of the Nuclear Materials Control Division, DOE/ORO; Nancy Allen of the DOE Office of Safeguards and Security; Rebecca J. Greer, radiochemist at DOE/ORO; Larry M. Gray, head of ORNL's Special Materials Management Department; and Harvey C. Austin, ORNL nuclear materials control and accountability officer. The safeguards project, which also includes a Laboratory-wide video monitoring system, a computerized alarm processor and video recording system, a nuclear materials vault and armored guard facilities, is part of an overall Nuclear Division effort to improve capability and accountability for nuclear materials, according to Laboratory Protection Division Director W. Charles Kuykendall.

UNION CARBIDE

Nuclear Division News

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Published every other week for employees such as:



Jan Ausband, ORGDP Technical Services Division.

Completes barrier production; employees told 'job well done'

A program marking the successful completion of the last major production campaign in the Barrier Manufacturing Plant at ORGDP was held on July 6.

The facility, which had operated since the late 1940's, has been this country's sole supplier of gaseous diffusion barrier. "Barrier" is the material in the gaseous diffusion process which actually performs the isotopic separation or enrichment of uranium. During the process operation, uranium hexafluoride is pumped through the inside of barrier tubes which contain hundreds of millions of uniformly-sized, sub-microscopic openings per square inch.

The gas molecules containing the lighter uranium-235 move slightly faster than those containing U-238 and contact the tube walls more frequently. Consequently, the gas diffusing through the barrier tube pores is enriched in uranium-235, the fissionable isotope of uranium that is used as fuel for nuclear power plants.

During the 10-year campaign, which was part of DOE's Production Equipment Modification program, ORGDP produced enough high quality barrier to retube more than 3100 separating stages in the three gaseous diffusion plants. All production and performance goals were reached. Employment during that period averaged 400 and peaked at 900 in 1976.

In commending employees who were involved in the production of barrier over the years, Nuclear Division President Roger F. Hibbs said: "This is both a sad and a proud time.

It's sad because it marks the completion of 35 years of barrier production in the United States, and more important, here at K-25. It is also a proud time because it is a tribute to the thousands of people who have been involved in this enterprise — the people who originally developed the process for manufacturing the product, who designed the plant in which the material was made, who constructed the plants and who operated and maintained the facilities over the many years.

"These facilities produced a very superior quality product which has been instrumental in keeping the U.S. in the forefront of the uranium enrichment business. I am proud to say thank you for a job well done."

Also participating in the program were Senior Vice President Paul R. Vanstrum; Ewin B. Kiser, assistant manager for Enriching Operations and Development, DOE-ORO; and Ken W. Sommerfeld, former ORGDP manager, who is currently executive director at ORNL.

All production activities at the Barrier Plant have ceased, except for salvage work to recover valuable metals from scrap. Some of the equipment will be placed in standby in case there is a need for additional barrier in the future.

Portions of the building will be renovated to house equipment for the Atomic Vapor Laser Isotope Separation (AVLIS) process which will be moved from Y-12. AVLIS was recently selected by DOE as the advanced isotope separation process for further development and demonstration.



ORNL UW COMMITTEE — W. D. (Dub) Shults, ORNL United Way chairman, recently announced his campaign staff for 1982. Pictured at a meeting are, from left, Emily Gray, materials manager; Paula Wright, publicity; Bob Sherlin, treasurer; Shults; Tom Gilliam, representing the Atomic Trades and Labor Council; Herb Trammell, co-chairman; Steve Dagley, associate chairman for International Guards Union of America; and Mike Emery, deputy treasurer. Staff not present for the photograph were Sharon Whitaker, assistant to the chairman; Norm Beeler, associate chairman for Atomic Trades and Labor Council; Marilyn Skipper, assistant to the treasurer; Norma Callaham, transportation coordinator; and George Joseph, solicitor training director.



MEMORIAL PLAQUE — William F. Thomas, ORGDP manager, right, presents J. R. Johnson, a barrier operator since 1952, with a plaque that will be permanently hung in the Barrier Manufacturing Plant. The plaque commemorates the facility's 35 years of producing high quality barrier for the nation's three gaseous diffusion plants.

News About People

Three staff members named ANS fellows







Maskewitz



Ricci

Three Nuclear Division staff members has been named fellows of the American Nuclear Society. Elizabeth B. Johnson and Betty F. Maskewitz of ORNL and Enzo Ricci of ORGDP received the honor at the Society's annual meeting in Los Angeles. The designation recognizes notable original research or invention, technical leadership of substantial scope or outstanding leadership as a teacher in the nuclear field.

The ANS cited Johnson for contributions to "improved understanding of nuclear chain reactions and nuclear criticality safety through experimentation and personnel training, and for dedicated service to the ANS standards effort." A development associate in ORNL's Instrumentation and Controls Division, she has been with the Nuclear Division since 1950.

Maskewitz was cited for contributions to "the state of the art of computing technology for radiation analysis, through advocacy and development of the 'open' code or data package to make the technology available to scientific scrutiny and improvement by users world-wide." A specialist in engineering physics and information science, she joined Union Carbide in 1952 and is associated with ORNL's Engineering Physics Information Centers.

Ricci was cited for "pioneering work in charged particle activation analysis, and for his interest and initiative in the applications of these techniques to energy and environmental problems." He joined the Nuclear Division in 1962 and is currently research and development manager for the Enrichment Safeguards Program at ORGDP.

Blood drive at ORGDP sets hours for shift workers

ORGDP is set for the first of Medic's blood drives, planned for Thursday and Friday, August 5 and 6. Hours for the blood mobile on Thursday will be from 10 a.m. to 6 p.m. and on Friday from 6 a.m. to 2 p.m. Thus, workers on all shifts will have the opportunity to donate blood.

Fran DeLozier, manager of Multi-Site Gaseous Diffusion Projects, who will head the blood drive, announces the following divisional representatives throughout the plant who will coordinate scheduling and donor soliciting.

They are:

Lonnie L. Anthony - Computer Sciences Frances G. Breazeale - Accounting Alice A. Christy - Environment Management **Terry Domm** - Engineering Bill Joyner - Purchasing, Auditing Sue Kelly - Engineering Jim Lane - Security Ann Malone - Employee Relations

Sherry Robbins - Operating Contractors Project Office

Duane Starr - Advanced Isotopes

Separation

Chuck Stevenson - Process Support

Development

Ray Stewart - Finance, Materials and Services



SET BLOOD DRIVE PLANS — ORGDP's divisional leaders map plans for blood drives planned there August 5 and 6. Seated from left are Bill Joyner; Frances Breazeale; Jean Drennen; Medic representative; Chuck Stevenson; and Lonnie Anthony. Standing are Don Tevalut; Doug Stevens; Roy Fenstermaker; Carolyn Weaver; Sherry Robbins; Jon Walls; Ann Malone; Fran DeLozier, drive chairman; Terry Domm, and Jim Lane.

Don Tebault

Operations

Ted Wagner

- Central Employment

Jon Walls

- Separation Systems

Caroline Weaver

- Operations Systems and Planning

Doug Stevens

- Maintenance

Stevens, Oil Chemical and Atomic Workers vice president, and Lane, a

member of the International Guard Union Workers of America, voiced the support of labor unions at ORGDP for the drive. "Giving blood is not only the thing to do, but in so doing here on the job, we make sure that our families as well as ourselves are covered for blood needs," Stevens said. Organized labor throughout the East Tennessee area is a strong supporter of Medic's efforts to supply

blood in the 20-country area covered by the community blood bank.

Subcontractor employees at ORGDP will be covered just like Union Carbide employees. They are welcome to participate in the blood drives there, as are subcontractor employees at the other two Oak Ridge plants.

Drives at ORNL and Y-12 will be announced later.

'Good ole summertime' often not so good

With the advent of summer and its typical sultry, humid weather, it is a good time to be reminded of the potential heat stress hazards both on and off the job. In order to make the most of the "good ole summertime," the following information is offered to help you recognize the symptoms of heat stress illnesses and to enable you to take the proper preventive measures to avoid the incidence of heat-related problems for you and your family. Below are some typical symptoms of heat illnesses:

- Heat cramps Painful intermittent spasms of voluntary muscles following hard physical work in a hot environment. Cramps usually occur after heavy sweating due to the body's loss of salt and often begin at the end of a work shift.
- Heat exhaustion Profuse sweating, weakness, rapid pulse, dizziness, nausea and headache.
 Skin is cool and sometimes pale and clammy with sweat. Body temperature is normal or subnormal. Nausea, vomiting, and unconsciousness may occur.
- Heat stroke Sweating is diminished or absent. Skin is hot, dry and flushed. Increased body temperature, which, if uncontrolled, may lead to delirium, convulsions, or coma and even death. As a serious medical emergency, medical care is urgently needed.

There are a number of recommendations which will help prevent the occurrence of heat-related illnesses. These include the following:

- 1. Drink more than your normal amount of fluids, making sure your intake is spread throughout the day.
- 2. Increase your salt intake by drinking salted fluids and/or adding extra salt to food. Salt tablets are not recommended for replenishing body salts since they are not readily absorbed and make some individuals nausated. Persons restricted to low-sodium diets should consult their physician regarding salt replenishment.
- Around the home, try to schedule strenuous activities such as sports, mowing, gardening and other chores during the cooler parts of the day, such as early morning or late afternoon.
- 4. Pace yourself. It's better at work and at play to have short intervals of exertion, interspersed with rest intervals, than to stay in a hot area too long.
- When possible, breaks should be taken in a cool area.

- Be aware of the signs and symptoms for heat cramps, heat exhaustion and heat stroke.
- 7. On the job, report any unusual conditions to your supervisor.

Most heat-stress illnesses are avoidable if an individual shows a healthy respect for his or her own body. Keeping physically fit and in good overall health, replenishing lost salts, drinking plenty of fluids and knowing the symptoms of heat illness are the best preventative "medicines." As always, individual work-related problems or questions should be referred to your supervisor. Further questions can be referred to the Industrial Hygiene staff or to the Medical Department at your installation. At home, if you have questions in regard to heat illness, contact your family physician. Working in the heat may not always be pleasant, but it can at least be safe.

Next issue...

The next issue will be dated August 5. The deadline is July 28.



Tunstall

Tunstall promoted

J. Nelson Tunstall has been appointed head of the applied engineering section in Computer Sciences Division's, Technical Applications Engineering Department. He succeeds Shafik K. Iskander, who has taken a two-year assignment with the Nuclear Regulatory Commission's Division of Engineering Technology in Stuttgart, West Germany.

A native of Raleigh, N.C., Tunstall received a BS degree in mathematics from the University of North Carolina and an MS degree in applied mathematics from North Carolina State University. He joined the Nuclear Division in 1964.

Tunstall and his wife, Betsy, have a son and a daughter. They live on lona Circle in Oak Ridge.

Equal parking violations rules?

QUESTION: I recently received a parking ticket at Portal 2 East at ORGDP, and my supervisor called me in and talked to me about it. Meanwhile, a car that had been parking illegally next to mine each day continues to do so and no one has spoken to the owner about it at all. What can actually be done to an employee for parking illegally, and why are the rules not enforced equally for all employees?

ANSWER: Illegal parking creates safety hazards. ORGDP management has communicated to all employees on more than one occasion that parking violations will not be condoned. An employee who parks illegally should be counseled by his/her supervisor. The supervisor should remind the employee that illegal parking is a violation of Company rules and that repeated violations will result in appropriate progressive disciplinary action. It is our intent to enforce the rules consistently. If we fail in this respect, please call the specific instance to our attention.

Slow traffic

QUESTION: On a recent Friday during the peak afternoon traffic period, a crane was en route to the Y-12 Plant via Bethel Valley Road at a speed estimated at about 5 mph. It took me approximately 40 minutes to travel 8 miles between ORNL and the Y-12 turnoff. This is not an isolated example. Is there some way that the Nuclear Division can control the movement of slow-moving vehicles during peak traffic periods when these vehicles are in some way

related to the operation of Division facilities?

ANSWER: Except in an emergency situation, slow-moving vehicles under the control of the Nuclear Division are not scheduled to travel between the plants and laboratory during peak traffic periods. It is not possible to direct the movement of such vehicles under the control of others; however, we will request construction contractors working in the plants and laboratory to avoid heavy equipment movement during peak traffic periods.

Keeping doors closed

QUESTION: Some time ago a second set of doors was installed at the north exit of Building K-1001 between "B" and "C" wings. The purpose was to conserve energy. However, wooden wedges were used to keep the doors open in winter. Now that summer is here, both sets of doors are left open. Can't management post signs to remind employees that they should be more energy conscious and that they should leave the doors closed at all times?

ANSWER: Blocking the doors of the K-1001 building is typical of the many unsatisfactory actions taken by individuals for their own convenience, which frustrate efforts for energy conservation. Decals will be obtained and placed on doors indicating that the doors should be closed for energy-conservation purposes. This will help keep the doors from being blocked and should encourage conscientious employees like you to close the doors when they are blocked open.

Process Engineering changes

Three appointments in the Process Engineering organization have been announced by Ron W. Glass, manager. John P. Bell was appointed head of the Production Chemical Engineering Department; Claude E. Buttram will serve as head of the production engineering section at Y-12; and Dennis S. Milewski will serve as supervisor of the production chemical engineering section at ORGDP.

Bell, a native of Cleveland, Ohio, received a BS degree from the U.S. Military Academy at West Point and an MS degree in chemical engineering from Case Western Reserve University.

Prior to joining the Nuclear Division in 1979 as an engineer in the Chemical Process Design Department at ORNL, Bell served as an officer in the U.S. Army Corps of Engineers, and worked for both the Mogul Corporation and Pollutronics, Inc. His most recent position has been as a section head in the Radiochemical Design Department at ORNL.

Bell, a registered professional engineer in Tennessee and Ohio, is a member of the Tennessee Society of Professional Engineers.

He and his wife, Ellen, live on Connors Circle, Oak Ridge, with their daughter.

Buttram was born in Harriman. He received his BS degree and has completed course work for his MS degree in chemical engineering at the University of Tennessee.

Prior to joining the Nuclear Division as a process engineer in 1980, Buttram was employed by TVA. He is a member of the American Institute of Chemical Engineers, Tau Beta Pi and Phi Kappa Phi.





Bell

Buttram



Milewski

Milewski was born in Mineola, Long Island, N.Y. He received a BS degree in chemical engineering from Northeastern University and has done graduate work at Johns Hopkins University and the University of Tennessee.

Before joining the Nuclear Division in 1978, Milewski was employed by Carborundum Company and the J. M. Huber Corporation. He is a member of the American Institute of Chemical Engineers.

Milewski and his wife, Elaine, live on Tallahassee Lane, Knoxville, with their two sons.

Anniversaries

ORNL

35 YEARS

Eugene Lamb, Operations; Alma J. Soard, Industrial Safety and Applied Health Physics; Dorothy M. Soard, Industrial Safety and Applied Health Physics; Charles C. Shelton, Laboratory Protection; and Edward C. Hendren, Chemical Technology.

30 YEARS

Samuel S. Hurt III, Operations; A. J. Smith, Industrial Safety and Applied Health Physics; Victor A. Emert, Instrumentation and Controls; Betty F. Maskewitz, Engineering Physics; and Charles F. Smith, Industrial Safety and Applied Health Physics.

25 YEARS

James E. Thompson.

20 YEARS

Edward B. Loftis, Betty L. McGill, Jeanne C. Auxier and Hee J. Kim.

Y-12

30 YEARS

John W. Stair, Engineering Test Operations; and William C. Guettner, Dispatching. 25 YEARS

Larry T. Rinderer, Robert A. Robinette, Ray H. Turner, Jack Johnson, Frank O. Russell and James E. Taylor.

20 YEARS

Harold A. Durant and Elmer T. Price.

PADUCAH

30 YEARS

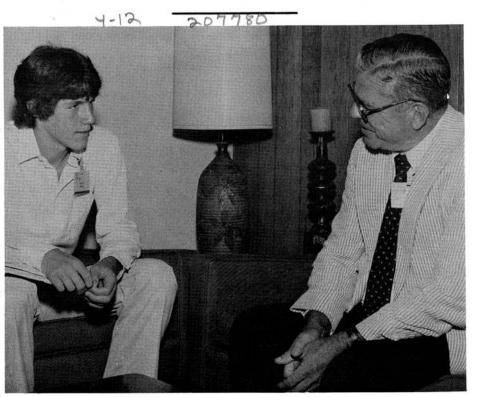
E. Marie Johnson, Finance and Budget; John W. Stearns, Instrument Maintenance; Thomas G. Lanham, Plant Engineering; Frederick A. Thomason, Fabrication Shop; William O. Cherry, Analytical Laboratory; Elza Youngblood, Materials Department; Rex D. Kluesner, Electrical Maintenance; and James Johnson, Plant Services.

25 YEARS

James E. Courtney and James B. Wilkerson.

20 YEARS

Bobby E. Sims and Marvin L. Ramer.



REPORTS ON CONFERENCE — Christopher S. McKenney, left, a senior at Oak Ridge High School, reports on his attendance recently at the economic leadership conference at Bell Buckle, Tenn., to Roger F. Hibbs, President of the Nuclear Division. Union Carbide Corporation sponsored the student's visit, paying the registration and travel expenses to the Webb School conference. A total of 48 outstanding students from Tennessee secondary schools attended the conference.



AT UNION CARBIDE EXHIBIT — These visitors are among the thousands of people who have toured the Union Carbide exhibit at the 1982 World's Fair in Knoxville. The exhibit, which is located in the Fair's Lifestyle and Technology Building, is entitled "See How They Run," and features some 150 battery-powered toys and games.

Save Energy / Share The Ride

Y-12

CAR POOL MEMBER from Cedar Bluff Shopping Center, Knoxville, to any portal, 7:30-4. Bill Brosey, plant phone 4-0881; home phone Knoxville 693-4542.

CAR POOL MEMBERS from West Knoxville, Cedar Bluff, Walker Springs areas, to North or East Portal, flexible hours. Kay, plant phone 6-4921.

RIDE from Lakefront Mobile Home Park, Clinton, to Central Portal, 8-4:30. Linda, plant phone 4-3820.

ORNL

VAN POOL RIDERS NEEDED from Sutherland Avenue and Papermill Drive area, 8:15-4:45. D. P. Atkins, plant phone 4-5463; home phone 584-3766

CAR POOL MEMBER WANTED from Knoxville, Middlebrook Pike/ Robinson Road/Piney Grove Church Road (Landmark, Stonebrook and Canby Hills subdivisions), to East Portal, 8:15-4:45. J. W. Nave, 4-4485; or J. W. Sims, 4-5926.

RIDE NEEDED from Oak Ridge Highway between Karns and Solway to East Portal, 8:15-4:45. Peterson, plant phone 4-4483; home phone 690-3989.

VAN POOL RIDERS NEEDED from Walker Springs area (Sans Souci, Plantation Manor, Wesbridge, Brendon Park and Crestwood Hills) to any portal, 8-4:30. Mike, plant phone 4-4885; home phone 691-4194.

CAR POOL MEMBER NEEDED from Maryville to East or West Portal, 8-4:30. Bob Sherlin, plant phone 4-4373; home phone 983-2509.

ORGDP

CAR POOL MEMBERS OR RIDERS from Broadacres Subdivision, Powell, to Portal 2, 7:45 to 4:15. John Hoffmeister, plant phone 4-8112; home phone 938-6755.

CAR POOL MEMBER from Inskip, Norwood area, to Portals 5 and 6 (others considered), 8-4:30. Jim McManus, plant phone 6-2466: home phone Knoxville 687-8460.

RIDERS WANTED for the Cumberland Estates Commuter Pool Service to any portal, day shift. Les Quarles, plant phone 4-8663; home phone Knoxville 691-7453.

"Drumwright" offers **UCC** discount tickets

The hit production, "Drumwright," starring John Cullum, is offering discount prices to Union Carbide employees and their families. Normally, tickets are \$15, \$13 and \$9 for adults, with students admitted for half price and children under 12 for

The musical is showing at the Tennessee Theater in Knoxville at 8 p.m. daily, except Sundays. Just tell the box office or reservations clerk that you are with Union Carbide, and your tickets all will be discounted by \$2.

Safety Scoreboard

Time worked without a lost-time accident through July 15:

Y-12 Plant 2 Days	90,000 Employee-Hours
ORGDP154 Days	3,669,558 Employee-Hours
ORNL 29 Days	703,080 Employee-Hours
Paducah716 Days	6,102,000 Employee-Hours

Fishing rodeo winners...

ORGDP...

Fishermen from ORGDP closed out the first half of the year with medium-to-fair catches.

Winners were:

Smallmouth Bass Claude Prater 6 lbs. 8 oz. **Bill Price** 5 lbs. 14 oz Bill Ewing 5 lbs

Largemouth Bass Mike Bowers 6 lbs. 10 oz. Norman Rathbone 6 lbs. 4 oz. James Herrin 5 lbs. 3 oz.

Striped Bass P. D. Brooks 3 lbs. 4 oz. Darrel Howard 2 lbs. 10 oz.

Walleyed Pike H. E. Walter (wife) 4 lbs. 6 oz. 4 lbs. 2 oz. **Amos Walters**

P. D. Brooks 4 lbs. C. W. Castel 3 lbs. 6 oz. Crappie

Oscar Cate 2 lbs. 4 oz. L. W. Clowers 1 lb. 11 oz J. D. Hart 1 lb. 8 oz.

Sunfish David Godsey 11.3 oz.

Trout L. P. Keaton 15 oz.

Muskie Carl Neu 10 lbs. 8 oz.

Rockfish Alan Payne 10 lbs. 5 oz.

Rough Fish F. M. Shoemaker (son) 6 lbs. 6 oz. John Hart 3 lbs. 14 oz.

Y-12...

Anglers from Y-12 competed in the 10-species fishing rodeo just ended. Winners were:

Smallmouth Bass Lysander Watts 6 lbs. 13 oz. Larry Hodge 6 lbs. 12 oz. John Guttery

Largemouth Bass L. R. Benker 9 lbs. 12 oz. Charles Beal 7 lbs. 12 oz. Byrl Adkission (son) 7 lbs

Striped Bass Don Campbell 2 lbs. 15 oz. 2 lbs. 4 oz. T. L. Crisp (son)

Walleyed Pike George Riggs 5 lbs G. H. Caylor (wife) 3 lbs.

Sauger J. R. Campbell 4 lbs. 12 oz. 3 lbs. 8 oz. R. E. Belker

Crappie W. L. Word 1 lb. 12 oz. Arnold Craft T. M. Clark 1 lb. 9 oz.

Mike Johnson 1 lb. 3 oz. C. E. Foster 12 oz.

Rockfish George Wells (son) 22 lbs. 8 oz.

Roughfish G. D. Mowery (son) 14 lbs. 5 oz. **David Willocks** 4 lbs. 2 oz. Russ Harden (daughter) 2 lbs. 8 oz.

Randy Harris

Trout

1 lbs. 2 oz.

ORNL...

A seven-pound walleyed pike took first place in that category in the ORNL fishing rodeo.

Smallmouth Bass

Other winners:

T. L. Miller

B. J. Miller

2 lbs. 8 oz. Striped Bass L. E. Lebo 2 lbs. 15 oz Scott Stevens (daughter) 2 lbs. 6 oz. W. G. Tatum 2 lbs 4 oz Walleyed Pike R. L. Atchley 7 lbs. 8 oz. Sam Hurt 5 lbs. 8 oz. A. D. Ryon 3 lbs. 2 oz. Crappie J. H. Evans 2 lbs. 7 oz.

~ 1 lb. 12 oz.

Sunfish Max Brewer 5 oz.

Trout Paul Phillips 12 oz.

Muskie **Eddie Bailiff** 10 lbs. 11 oz.

White Bass William Martin 5 lbs

Rough Fish William Davis 12 lbs. 8 oz.

Hi Power Rifle...

Frank Barnes, ORNL, took the July High Power Rifle League matches, scoring a 768 out of a possible 800. Roger Wiegand, Y-12, placed second with a 749; and Larry Weston, ORNL, came in third with a 740. Other scores were: G. Newton, DOE, 711; H. Bertini, ORNL, 707; Harold Fell, Y-12, 694; R. Hatmaker, TIC, 625; and A. Schiffleh, DOE, 618.

Mixed Bowling...

The Oops team holds a slight lead in the Carbide Family Mixed League, two points ahead of the Smooth Strokes.

High scorers recently were Edith Duckworth, with 191 scratch and a 625 handicap series, and Mary Hawkins, 537 scratch series. Elmer Johnson scored a 233 scratch single; Jim Steel, a 255 handicap game. Johnson returned to the boards with series of 604/652.

The Pinsetters scored a handicap game of 830; series of 2407.

Frame of mind

Traffic trouble on the way to work can put us in a frame of mind that's not conducive to safe work.

A quarrel at breakfast could launch the day the hard way and the effects carry over into that first hour of work.

Many find it hard to settle down, get started and concentrate right off the bat even under the best of circumstances.

An inadequate breakfast can spell trouble as well. Start the day off with habits that will lead to a safe, happy



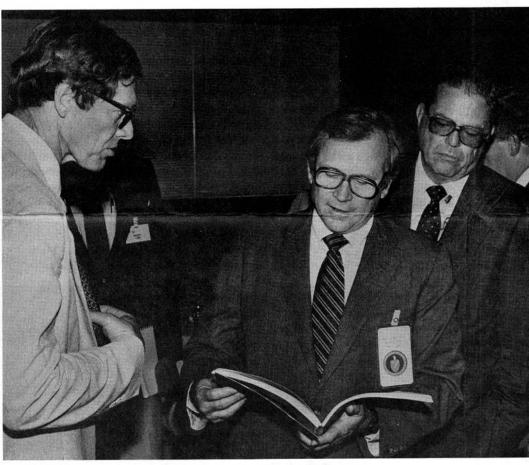
Hold news conference

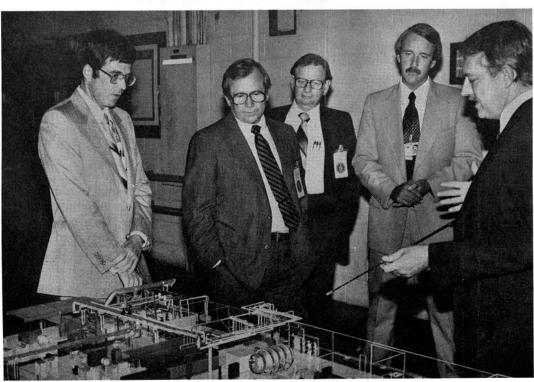
Baker, Alexander tour Oak Ridge facilities

Senate Majority Leader Howard Baker, Governor Lamar Alexander and members of their staffs visited the ORNL Large Coil Test Facility and were briefed on acid rain research during a July 7 visit to the Nuclear Division's Oak Ridge facilities.

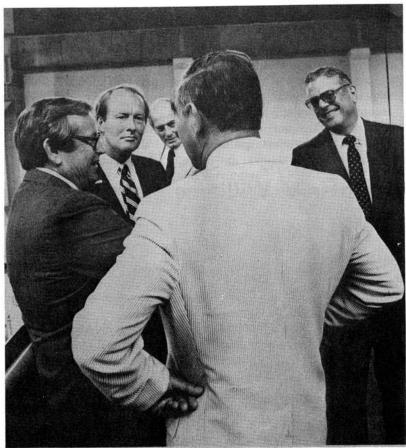
Baker and Alexander, who were hosted by Nuclear Division and DOE officials, also held a news conference in the Fusion Energy Division auditorium, which was attended by some 20 media representatives.

Senator Baker also was briefed on Atomic Vapor Laser Isotope Separation (AVLIS) during a later stop at the Y-12 Development Division.











QUALITY RECOGNITION — John A. Hall, right, an instrument mechanic in ORGDP's Development Maintenance Department, presents a plaque to Roger L. Davis, Separation Systems Division's Quality Assurance manager, in recognition of his outstanding support of the department's quality efforts. During the program, Hall also introduced a new field instrument calibration unit which he fabricated for use in the Centrifuge Instrument Certification Recall Program. This unit will be used as a working standard to calibrate vacuum monitoring instruments on site.

John W. Fields Jr. dies in Nashville



Mr. Fields

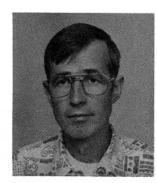
John W. Fields Jr., a general maintenance supervisor in the Plant and Equipment Division at ORNL, died July 3 at Vanderbilt Hospital in Nash-

ville. He lived at 306 Lakewood Road, Kingston.

Mr. Fields, a 29-year Carbide employee, was a member of Kingston United Methodist Church and the Veterans of Foreign Wars. He had served as city councilman and water board member for the city of Kingston.

Survivors include his wife, Anita T.; and sons, Ronald D. and Johnny W. Services were conducted at the Kyker Funeral Home chapel in Kingston. The family has requested that memorial contributions be made to the American Cancer Society or the East Tennessee Heart Association.

Thomas V. Williams dies July 7



Mr. Williams

Thomas V. Williams, Y-12's Dimensional Inspection Operations,

died July 7 at his Dayton, Tenn. home. A native of that city, he joined Union Carbide in 1979.

Survivors include his wife, Wanda Walker Williams; sons, Tommy and Sammy; mother, Blanche Williams; sisters, Mary Angel, Linda Bell, Sarah Brackett, Sharon Williams and Elsie Morgan; brothers, John H. and James Williams, and Bill Hickson.

Funeral services were held at the Coulter-Garrison Funeral Chapel, Dayton, with burial in the Rhea Memory Gardens.

Michaels, Congleton named in Advanced Isotope Separation

The formation of two new departments in the Advanced Isotope Separation Division at ORGDP has been announced by James E. Rushton, division manager.

Robert S. Congleton will head the Laser and Electro-Optics Department, which will coordinate engineering scale-up and demonstration activities for the Atomic Vapor Laser Isotope Separation process that was recently selected by DOE.

Gordon E. Michaels will head the Process Science and Analysis Department, whose responsibilities will include defining the system requirements for AVLIS, developing analytical methods that integrate the process science, engineering and cost data; and conducting design and operating studies to guide the development and demonstration programs.

Congleton was born in Hertford and grew up in Wilmington, N.C. He received his BS degree in physics from Georgia Institute of Technology and his MS in engineering physics from North Carolina State University. He has done additional graduate study at Polytechnic Institute of Brooklyn, N.Y.

Prior to joining the Nuclear Division in July, 1981, he worked for Exxon Nuclear Company and several other major industrial corporations. Congleton is a member of Tau Beta







Michaels

Pi, Phi Kappa Phi, Phi Eta Sigma and Sigma Pi Sigma honorary societies.

He and his wife, Anita, have two grown children. They reside on Newport Drive in Oak Ridge.

Michaels is a native of Jamaica, N.Y. He received his BS degree in physics and his MS degree in nuclear engineering from Rensselaer Polytechnic Institute.

In 1977, Michaels joined the AIS process evaluation group in the Operations Analysis and Planning Division (OA&P) at ORGDP. He later worked on heat transfer modeling in the Y-12 Development Division.

Michaels returned to ORGDP in 1980 as leader of OA&P's technical evaluations group, a position he held until his present appointment.

Michaels lives on Rhodora Road in Knoxville.

Recent Retirements



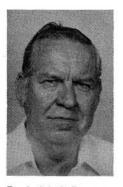
Mary R. Ford Health and Safety Research ORNL 33 years service



Walter G. Whatley Plant and Equipment ORNL 30 years service



Robert V. Fehling Computer Sciences ORGDP 26 years service



Frederick J. Dewey Information ORNL 28 years service

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